

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/902,667	07/12/2001	Katsutoshi Nishimoto	109498	2099
25944 7	590 01/09/2006		EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928			CABRERA, ZOILA E	
ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER
,			2125	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
Office Action Summary		09/902,667	NISHIMOTO ET AL.			
		Examiner	Art Unit			
		Zoila E. Cabrera	2125			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Operiod for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nety filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)[🛛	Responsive to communication(s) filed on 28 O	ctober 2005				
·	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
-,	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
- 4\⊠	Claim(s) 2,10 and 18 is/are pending in the app	lication				
٠/ڪ	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)□	5) Claim(s) is/are allowed.					
·	☐ Claim(s) is are dilewed. ☐ Claim(s) <u>2,10 and 18</u> is/are rejected.					
7)	Claim(s) is/are objected to.	·				
•	Claim(s) are subject to restriction and/o	r election requirement.				
	ion Papers					
	•	•				
9)☐ The specification is objected to by the Examiner.  10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
10)	Applicant may not request that any objection to the	•				
		• • •	` '			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority (	under 35 U.S.C. § 119					
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachmen		<b></b>	(DTO 440)			
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) ∭ Interview Summary Paper No(s)/Mail D				
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) er No(s)/Mail Date		Patent Application (PTO-152)			

### **DETAILED ACTION**

# Final Rejection

- 1. Claims 3, 11, 19 have been cancelled.
  - Claims 2, 10, and 18 are presented for consideration.
  - The rejection under 103 with respect to claims 2, 10 and 18 is maintained.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2, 10, 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inui et al. (US 5,204,821) and Andrade, JR. et al. (US 2003/0109950 A1) and further in view of Akihiro, Oyama (JP 11312197 A).

Regarding claims 2, 10 and 18, **Inui** discloses a parts procurement system comprising:

• virtual production line preparation means for preparing a virtual production line in which objects manufactured thereon are virtually placed in sequence based on long-term production plan data covering variable production of the objects and fixed production plan data covering fixed production of the objects (Col. 1, lines 17-28; Col. 2, lines 57-62; Col. 4, lines 13-29); and parts ordering means for determining parts and the number of the parts necessary for manufacturing the objects on the virtual production line prepared by the virtual production line

preparation means (Col. 1, lines 48-52; Fig. 6(1)), as well as calculating the parts ordering timing based on a production timing of the objects and parts delivery lead time (Col. 4, lines 41-47; Col. 5, lines 48-52; Col. 7, lines 27-28).

Inui discloses most of the limitations of claims 2, 10 and 18. However, Inui does not disclose long term production plan data that is more than one month. But Andrade discloses a method and system for planning operation in manufacturing plants wherein long term production plan data is more than one month (Page 1, [0002], lines 1-3; [0007], lines 12-15). Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the parts supply system of Inui with the system for planning operations in a manufacturing plant of Andrade because it would provide a planning system to optimally allocate equipment capacity to expected orders in a multiple production line manufacturing plant.

**Inui** and **Andrade** disclose most of the limitations of claims 2, 10 and 18 above but fail to disclose some limitations of claims 2, 10 and 18. However, **Akihiro** discloses such limitations as follows:

As for claims 2, 10 and 18,

correction means for correcting the virtual production line prepared by the virtual production line preparation means according to actual production results of the objects, wherein the parts ordering means places a parts order after calculating the parts ordering timing based on the corrected virtual production line (Page 6-7, [0063], i.e., In arrangement processing, it decides on the delivery need day of each subunit from this changed lead time of each routing of the schedule

expansion master 105 classified by model, and MRP expansion of the bill-of-materials master 101 is performed in each subunit unit, and it decides on the date of order and the delivery date of each part article after scheduling modification).

the correction means changes the virtual production line by correcting <u>at least</u> <u>one parameter out of</u> a production sequence change, a design change of the object, a production progress. (Page 6-7, [0063], i.e., In arrangement processing, it decides on the delivery need day of each subunit from this changed lead time of each routing of the schedule expansion master 105 classified by model; Page 2, [0019], i.e., the schedule modification processing section changes scheduling by modification of the lead time of this schedule expansion master classified by model at the time of usually generated scheduling modification, and only when the subunit itself is changed at the time of a design change; Page 7, [0065] when the lead time of the bill-of-materials master 101 changes substantially by a design change etc., it is made to change the bill-of-materials master 101, and enables it to make a schedule change easily).

Therefore, it would have been obvious to a person of the ordinary skill in the art at the time the invention was made to combine the parts supply system of **Inui** and **Andrade** with the schedule plan and preparation managing system of **Akihiro** because it would provide an improved system wherein an schedule plan can be corrected and changed easily and thereby decide the order days of the respective parts and executing a preparation processing (Abstract, Akihiro).

Application/Control Number: 09/902,667 Page 5

Art Unit: 2125

# Response to Arguments

3. Applicant's arguments filed October 28, 2005 have been fully considered but they are not persuasive. Applicants contend that Akihiro teaches changing scheduling based on a lead time not based on at least one of a production sequence change, a design change of the object and a production progress. Examiner disagrees because Akihiro teaches changing scheduling based on a design change of the object (Page 2, [0019], i.e., the schedule modification processing section changes scheduling by modification of the lead time of this schedule expansion master classified by model at the time of usually generated scheduling modification, and only when the subunit itself is changed at the time of a design change; Page 7, [0065] when the lead time of the bill-of-materials master 101 changes substantially by a design change etc., it is made to change the bill-of-materials master 101, and enables it to make a schedule change easily).

### Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Application/Control Number: 09/902,667 Page 6

Art Unit: 2125

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning communication or earlier communication from the examiner should be directed to Zoila Cabrera, whose telephone number is (571) 272-3738. The examiner can normally be reached on M-F from 8:00 a.m. to 5:30 p.m. EST (every other Friday).

If attempts to reach the examiner by phone fail, the examiner's supervisor, Leo Picard, can be reached on (571) 272-3749. Additionally, the fax phones for Art Unit 2125 are (571) 273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist at (703) 305-9600.

Zoila Cabrera Patent Examiner

1/5/06